

BHARAT HEAVY ELECTRICALS LIMITED
HEEP HARIDWAR INDIA-PIN 249403
FAX NO: 0091 1334 226462/223948
PHONE NO: 0091 1334 284144

Sub: Requirement of FORGING FOR JOINT FLANGE

The Heavy Electricals Equipment Plant (HEEP) located in Haridwar, India is one of the major manufacturing plants of Bharat Heavy Electricals Ltd. The core business of HEEP includes design and manufacture of large steam turbines, turbo generators and so on.

Bids are invited for following items through GeM Portal- <https://gem.gov.in>

Item Sl. No.	Item Description	Mat. Code	Drawing No.	Qty. (No)	Delivery	Delivery Period (Days from PO placement)
1	FORGING FOR JOINT FLANGE as per DRG: 41074258998 REV: 01 Forging as per Spec no AA19341 Testing as per AA0850118 Specification- AA19341 Rev:08	W95310742093	41074258998 REV: 01	Lot 1- 8 No Lot 2- 8 No Lot 3- 8 No Lot 4- 8 No Lot 5- 8 No Lot 6- 8 No Lot 7- 8 No	Lot 1-30/06/2025 Lot 2-30/08/2025 Lot 3-30/10/2025 Lot 4-30/12/2025 Lot 5-28/02/2026 Lot 6-30/04/2026 Lot 7-30/06/2026	Lot 1: 90 days Lot 2: 150 days Lot 3: 210 days Lot 4: 270 days Lot 5: 330 days Lot 6: 390 days Lot 7: 450 days

Remarks-

1. Delivery period mentioned in enquiry is indicative, bidders to quote their best possible delivery.
2. Item to be supplied as per drawing & Specification/Testing standard (drawings, standard & Specification attached).
3. Testing of the item will be done as per **AA0850118**.
4. **Breach of Contract:**
In case of breach of contract, wherever the value of security instruments like performance bank guarantee available with BHEL against the said contract is atleast 10% of the contract value, the same be encashed. In case the value of the security instruments available is less than 10% of the contract value, the balance amount be recovered from other financial remedies (i.e. available bills of the contractor, retention amount, etc. with BHEL) or legal remedies be pursued. The balance scope shall be got done independently without Risk & Cost of the failed supplier/ contractor. Further, levy of liquidated damages, debarment, termination, de-scoping, short-closure, etc., shall be applied as per provisions of the contract. Accordingly, recovery of an amount equivalent to 10% of the contract value may be made in case of breach of contract.
5. Payment terms shall be as follows:
The payment shall be made within no. of days as defined in the below table from appointed day

Type of Bidder	Payment Terms (Number of days)
Micro & Small Enterprises (MSEs)	45 days
Medium Enterprises	60 days
Non MSME	90 days

Appointed day means

- The day of delivery of material i.e. C-Note Date, subject to submission of non-discrepant documents by vendor as per Purchase Order.
- Or
- Where there is any objection regarding acceptance of goods, the same shall be informed to supplier within fifteen days from the day of the delivery of good. Appointed day will be the day on which such objection is removed by the supplier.
- For BOIs, the appointed day means the date of receipt of material at respective project Site (i.e. MRC date).

Note: Benefits of MSE (Price preference, Payment preference etc.) will be given only to those MSE Vendors who are manufacturers of offered items against the NIT. No MSE benefits shall be provided to Agents / Stockists / Dealers / Traders etc. for the items offered but not manufactured by themselves

6. “A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity’s interests. **The bidder found to have a conflict of interest shall be disqualified.** A bidder may be considered to have a conflict of interest with one or more parties in the bidding process, if”
- a. They have controlling partner (s) in common; **or**
 - b. They receive or have received any direct or indirect subsidy/financial state from any of them; **or**
 - c. They have the same legal representative/ agent for purposes of this bid; **or**
 - d. They have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder; **or**
 - e. Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components / sub-assembly/ Assemblies from one bidding manufacturer in more than one bid; **or**
 - f. In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorize only one agent / dealer. There can be only one bid from the following:
 1. The principal manufacturer directly or through one Indian agent on his behalf; and
 2. Indian/ foreign agent on behalf of only one principal;**or**
 - g. A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid; **or**

- h. In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidder must proactively declare such sister/ common business/ management units in same/ similar line of business.”
- 7. Vendor should raise inspection call for BHEL / TPI inspection at least 4 days in advance to the planned date of inspection. If customer inspection is envisaged at vendor's works, vendor should give inspection call at least 7 days in advance to the planned date of inspection.
- 8. For this procurement, the local content to categorize a supplier as a Class I local supplier/ Class II local Supplier/ Non-local supplier and purchase preference to Class I local supplier, is as defined in Public Procurement (Preference to Make in India), Order 2017 dated 19.07.2024 issued by DPIIT. In case of subsequent orders issued by the nodal ministry, changing the definition of local content for the items of the NIT, the same shall be applicable even if issued after issue of this NIT, but before opening of Part-II bids against this NIT.

Pre- Qualification Requirements

PQR Clause	PQR	Vendor's response																																
1	<p>Experience Requirement</p> <p>Vendor must have experience of manufacturing and supplying forgings of carbon steel or alloy steel grades in heat treated condition. Vendor must have manufactured and supplied at least 3 forgings in above material grade in last seven years as on date of issue of enquiry.</p> <p>In support of above, the vendor has to furnish details of 3 forging supplies in the following format.</p> <table><tr><th rowspan="2">PO number</th><th rowspan="2">Material Grade</th><th colspan="3">Dimension (in mm)</th><th rowspan="2">Date of Supply</th></tr><tr><th>OD</th><th>ID</th><th>Height</th></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>In support of experience, vendor to submit following document for at least one forging from the above table:</p> <ul style="list-style-type: none">- Copy of purchase order and its correlated test certificates (duly signed by Third party inspection agency / Customer). Test certificates shall cover chemical composition, heat treatment, mechanical properties, dimensional report, non-destructive test report etc.- Invoice / dispatch document.	PO number	Material Grade	Dimension (in mm)			Date of Supply	OD	ID	Height																								
PO number	Material Grade			Dimension (in mm)				Date of Supply																										
		OD	ID	Height																														
2	<p>Manufacturing & Testing facility</p> <p>a Vendor should have in-house forging and heat treatment facility to manufacture forgings of above material grade and enquiry drawing dimension.</p> <p>Outsourcing of forging and heat treatment is not acceptable. Vendor to confirm.</p> <p>Details of in-house manufacturing facilities for forging and heat treatment are to be submitted with offer.</p> <p>b <u>Raw material source:</u></p> <p>Vendor to submit confirmation and details as per Option 1 or Option 2, as applicable:</p> <p><u>Option 1:</u></p> <p>Raw material for forging shall be sourced from BHEL approved source listed below. Vendor to confirm (tick mark applicable).</p> <table><tr><td>CFFP, BHEL, Haridwar</td><td><input type="checkbox"/></td><td>Mahindra Sanyo</td><td><input type="checkbox"/></td><td>Arcvac Forge Cast Ltd.</td><td><input type="checkbox"/></td><td>MIDHANI</td><td><input type="checkbox"/></td><td>BGH GmbH</td><td><input type="checkbox"/></td><td>Laxcon</td><td><input type="checkbox"/></td><td>Goradia</td><td><input type="checkbox"/></td><td>RMG Alloy</td><td><input type="checkbox"/></td></tr><tr><td>Saarloha Special Steel</td><td><input type="checkbox"/></td><td>Starwire India</td><td><input type="checkbox"/></td><td>SAIL</td><td><input type="checkbox"/></td><td>Metal Ravne</td><td><input type="checkbox"/></td><td>BOHLER</td><td><input type="checkbox"/></td><td>Sunflag Iron</td><td><input type="checkbox"/></td><td>ISMT</td><td><input type="checkbox"/></td><td>Saurabh Metal</td><td><input type="checkbox"/></td></tr></table> <p><u>Option 2:</u></p> <p>Raw material from other than above listed vendor can also be considered with following condition:</p> <ul style="list-style-type: none">- Vendor to submit details of their source for carbon steel with details of their steel melting and refining facility.- At least one mill test certificate of ingot/billet/bloom of carbon steel supplied by this source. <p>c Vendor to confirm that they have all testing facility (in-house / outsourced) to carry out testing as per enquiry drawing and specification. In case of outsourcing of any test, vendor to agree for testing at NABL accredited labs only.</p>	CFFP, BHEL, Haridwar	<input type="checkbox"/>	Mahindra Sanyo	<input type="checkbox"/>	Arcvac Forge Cast Ltd.	<input type="checkbox"/>	MIDHANI	<input type="checkbox"/>	BGH GmbH	<input type="checkbox"/>	Laxcon	<input type="checkbox"/>	Goradia	<input type="checkbox"/>	RMG Alloy	<input type="checkbox"/>	Saarloha Special Steel	<input type="checkbox"/>	Starwire India	<input type="checkbox"/>	SAIL	<input type="checkbox"/>	Metal Ravne	<input type="checkbox"/>	BOHLER	<input type="checkbox"/>	Sunflag Iron	<input type="checkbox"/>	ISMT	<input type="checkbox"/>	Saurabh Metal	<input type="checkbox"/>	
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(Quality Requirements)

Sl. No.	Quality Requirement	Vendor's confirmation (Y/N)
1	VENDOR TO ACCEPT AND ENDORSE BHEL QP (NO: QA/CF/QP/319 REV 01.)	
2	INSPECTION BY BHEL NOMINATED AGENCY TUV AS PER BHEL APPROVED QP.	

Signature with stamp

Name:

Name of Firm:

Designation:

Date:

Self-Certification for local content

**DECLARATION REGARDING MINIMUM LOCAL CONTENT IN LINE WITH
REVISED PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA), ORDER 2017 DATED 04TH
JUNE, 2020 AND SUBSEQUENT ORDER(S)**

(To be typed and submitted in the Letter Head of the Entity/Firm providing certificate as applicable)

To,

(BHEL HEEP Haridwar)

Dear Sir,

Sub: Declaration reg. minimum local content in line with Public Procurement (Preference to Make in India), Order 2017-Revision, dated 04th June, 2020 and subsequent order(s).

Ref: 1) GeM Bid Specification No:

2) All other pertinent issues till date

We hereby certify that the items/works/services offered by..... (*specify the name of the organization here*) has a local content of _____ % and this meets the local content requirement for **'Class-I local supplier' / 'Class II local supplier'** ** as defined in Public Procurement (Preference to Make in India), Order 2017-Revision dated 04.06.2020 issued by DPIIT and subsequent order(s).

The details of the location(s) at which the local value addition is made are as follows:

1. _____ 2. _____

3. _____ 4. _____

...

Thanking you,

Yours faithfully,

**(Signature, Date & Seal of
Authorized Signatory of the Bidder)**

**** - Strike out whichever is not applicable.**

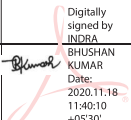
Note:

1. Bidders to note that above format, duly filled & signed by authorized signatory, shall be submitted along with the techno-commercial offer.
2. In case the bidder's quoted value is in excess of Rs. 10 crores, the authorized signatory for this declaration shall necessarily be the statutory auditor or cost auditor of the company (in the case of companies) or a practising cost accountant or practicing chartered accountant (in respect of suppliers other than companies).
3. In the event of false declaration, actions as per the above order and as per BHEL Guidelines shall be initiated against the bidder.

(Quality Plan)
QA/CF/QP/319 REV 01

MANUFACTURER'S NAME AND ADDRESS			STANDARD QUALITY PLAN				TO BE FILLED BY BHEL		TO BE FILLED BY BHEL		
BHEL	VENDOR'S NAME	ITEM	CARBON STEEL FORGING		QP NO.	QA/CF/QP/319					
				REV	01						
		DRG. NO.	AS PER PO								
		SPEC.	AS PER PO								
SL. NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORDS	AGENCY		REMARKS
1	2	3	4	5	6	7	8	9	D	10	11

1.	MELTING	CHEMICAL COMPOSITION	CRITICAL	CHEMICAL	100%	BHEL SPEC.	BHEL SPEC.	TC	P	V		RAW MATERIAL SHALL BE PROCURED FROM BHEL APPROVE D SOURCES ALONG WITH TEST CERTIFICATE
2.	FORGING	FORGING STEPS	MAJOR	VISUAL	100%	INTERNAL TECHNOLOGY	INTERNAL TECHNOLOGY		P	V		
3.	QUALITY HEAT TREATMENT	TIME TEMP CONTROL	MAJOR	MEASURE	100%	BHEL SPEC	BHEL SPEC	TC	P	V		
4.	TEST PIECE IDENTIFICATION	STAMPING	MAJOR	VISUAL	BHEL SPEC	BHEL SPEC. & DRG.	BHEL SPEC & DRG.		P	W		
5.	MECHANICAL TESTING	MECHANICAL PROPERTIES	MAJOR	MECHANICAL	PER HEAT PER HT BATCH	BHEL SPEC.	BHEL SPEC.	TC	P	W		
6.	CHEMICAL TESTING	CHEMICAL COMPOSITION	MAJOR	CHEMICAL		BHEL SPEC.	BHEL SPEC.	TC	P	V		
7.	UT	ULTRASONIC TEST	MAJOR	UT	100%	BHEL SPEC.	BHEL SPEC.	TC	P	W		
8.	ANY OTHER TEST IF CALLED IN DRG. INCLUDING IBR CERTIFICATE	AS PER DRAWING	MAJOR	AS PER DRG.	100%	BHEL SPEC.& DRG.	BHEL SPEC.& DRG.	TC	P	W		
9.	MACHINING	DIMENSIONS	MAJOR	MEASURE	100%	DRAWING	DRAWING	TC	P	W		
10.	MARKING PRESERVATION & PACKING	MARKING PRESERVATION & PACKING	MAJOR	VISUAL	100%	BHEL DRAWING & SPEC	BHEL DRAWING & SPEC		P	V		

MANUFACTURER/SUBCONTRACTOR	 Digitally signed by INDRA BHUSHAN KUMAR Date: 2020.11.18 11:40:10 +05'30'	LEGEND: ! RECORDS IDENTIFIED WITH 'TICK' SHALL BE ESSENTIALLY INCLUDED BY CONTRACTOR IN QA DOCUMENTATION. M: MANUFACTURER / SUBCONTRACTOR B: BHEL / NOM. INSPECTION AGENCY N: CUSTOMER INDICATE 'P' PERFORM 'W' WITNESS AND 'V' VERIFICATION ALL 'W' INDICATED IN COLUMN 'N' SHALL BE 'CHP' OF CUSTOMER	FOR CUSTOMER USE	APPROVED BY

(Specification/Standards)

**Spec: AA19341 Rev:08,
Standards: AA0850118**



CORPORATE PURCHASE SPECIFICATION

AA 193 41

Rev. No. 08

PREFACE SHEET

1.5% MANGANESE STEEL FORGINGS – (Gr: 20C15)

FOR INTERNAL USE ONLY
REMOVE THIS PREFACE BEFORE ISSUE TO SUPPLIERS

Comparable Standards:

Suggested/Probable Suppliers and Grades:

Refer plant vendors list.

User Plant References:

- | | |
|------------------|--------------|
| 1. HEEP, HARDWAR | : -- |
| 2. HYDERABAD | : CSN 411523 |
| 3. BHOPAL | : -- |

Revisions :

Cl: 31.713 of MOM of FCF+HTM

APPROVED :

INTERPLANT MATERIAL RATIONALISATION
COMMITTEE-MRC (FCF+HTM)

Rev. No. 08

Amd.No.

Reaffirmed

Prepared
HEEP
HARDWARIssued
Corp. R&DDt. of 1st Issue
MARCH, 1978

Dt.:22.11.2011

Dt :

Year :



CORPORATE PURCHASE SPECIFICATION

AA 193 41

Rev. No. 08

PAGE 1 OF 6

1.5% MANGANESE STEEL FORGINGS – (Gr:20C15)**1.0 GENERAL:**

This specification governs the quality requirements of 1.5% Manganese Steel Forgings, Material Grade 20C15.

2.0 APPLICATION:

Suitable for components requiring high strength and weldability.

3.0 CONDITION OF DELIVERY:

Forgings shall be suitably heat treated to achieve mechanical properties as specified in clause 12.0 of this specification.

Rough machining of the forgings shall be carried out, unless otherwise specified on BHEL order/drawing.

4.0 COMPLIANCE WITH NATIONAL STANDARDS:

There is no national standard covering this material and mechanical properties.

5.0 DIMENSIONS AND TOLERANCES:

The dimensions and tolerances shall be as specified in BHEL order/drawing. Wherever these are not specified, the machining allowances and tolerances shall be as specified below.

For finish machined drawings : 3 ± 1 mm

For rough machined drawings : ± 1 mm

6.0 MANUFACTURE:

Forgings shall be manufactured from steel produced by the open hearth, electric or such other process as may be agreed to between BHEL and the manufacturer. Steel shall be fully killed.

Sufficient discard shall be made from each ingot to ensure freedom from pipe, segregation and other defects.

The amount of hot working and finishing temperature shall be such as to ensure complete soundness and adequate uniformity of structure and mechanical properties after heat treatment. The forgings shall not be over heated.

The minimum reduction ratio when forgings are made out of ingots shall be 4:1.

For sizes above 250mm ruling section the minimum reduction ratio shall be 3.5 : 1

Revisions :

Cl: 31.713 of MOM of FCF+HTM

APPROVED :

**INTERPLANT MATERIAL RATIONALISATION
COMMITTEE-MRC (FCF+HTM)**

Rev. No. 08

Amd.No.

Reaffirmed

Prepared
HEEP
HARDWARIssued
Corp. R&DDt. of 1st Issue
MARCH, 1978

Dt. 22.11.2011

Dt :

Year :

AA 193 41

Rev. No. 08

PAGE 2 OF 6

CORPORATE PURCHASE SPECIFICATION



Note: Raw material like Ingots/Blooms/Billets required for forgings should be procured from BHEL approved sources along with test certificate."

7.0 HEAT TREATMENT:

Forgings shall be suitably heat treated to achieve mechanical properties as specified in clause 12.0. Test pieces shall also be heat treated along with the forgings they represent.

8.0 FINISH:

As mentioned in the drawing.

9.0 FREEDOM FROM DEFECTS:

Forgings shall be free from defects such as cracks, flakes, seams, segregation, harmful non-metallic inclusions and other defects which may affect the utility of the forgings.

10.0 CHEMICAL COMPOSITION:

The melt analysis of steel and permissible variation in the composition of the forgings from the melt analysis shall be as specified below:

Element	Melt analysis, percent		Permissible variation, percent.
	min.	max	
Carbon	0.16	0.24	± 0.02
Silicon	0.10	0.35	± 0.03
Manganese	1.30	1.70	± 0.05
Sulphur	--	0.035	+ 0.005
Phosphorus	--	0.035	+ 0.005

Note:

- 1) Elements not quoted above shall not be added to the steel, other than for the purpose of finishing the heat and shall not exceed the following limits:

Element	Percent, max.
Nickel	0.30
Chromium	0.30
Copper	0.25
Molybdenum	0.15
Vanadium	0.05
Tin	0.05

- 2) Carbon equivalent (melt analysis) value : C.E. = 0.48%, max.

$$\text{C.E.} = \text{C} + \frac{\text{Mn}}{6} + \frac{\text{Cr}+\text{Mo}+\text{V}}{5} + \frac{\text{Ni}+\text{Cu}}{15}$$

CS-692



CORPORATE PURCHASE SPECIFICATION

AA 193 41

Rev. No. 08

PAGE 3 OF 6

11.0 TEST SAMPLES:

- 11.1 Unless otherwise specified in the order/drawing, test samples shall be taken from each melt and each heat treatment batch. Test samples should be cut from the heat treated forgings by cold process only and shall receive no further heat treatment.

Test samples shall be taken from locations indicated on the drawing, leaving enough material, if required, for testing at BHEL's end, integral with the forging.

Test samples shall be cylindrical or rectangular in shape and cut at a distance of 12.5 mm below the heat treated surface.

- 11.2 When integral test pieces are not called for, a test sample equivalent to the ruling section or 65 mm diameter, whichever is less and 610 mm long, having similar reduction ratio and heat treatment, as the forgings it represents shall be provided per heat, per heat treatment batch for check testing at BHEL along with the forgings. The sample shall be properly identified and correlated with the heat/heat treatment Batch No/Test certificate No. Test samples shall be taken at a distance of 12.5 mm below the heat treated surface.
- 11.3 Test samples shall generally be taken in the longitudinal direction. However, for economic reasons or where the size/configuration does not permit the same. Test samples may be taken in the transverse or radial direction. The test sample orientation shall be mentioned in the test certificate.

12.0 MECHANICAL PROPERTIES:

The test pieces, after being heat treated as per clause 7.0 above, shall show the following properties upto a limiting section of 800mm. Properties for thicker sections shall be subject to agreement between BHEL and the manufacturer. Test methods are specified below:

- 12.1 Tensile test : As per IS:1608
- 12.2 Hardness test (Brinell) : As per IS:1500
- 12.3 Charpy Impact Value (2mm U-Notch) : As per IS :1499

This test applicable for forgings of sizes above 16mm only.

Property	Sample (See cl.11.3)	Limiting ruling section, mm	
		Upto & incl.400	> 400 & upto 800
Tensile strength N/mm ²	Longitudinal/ Transverse/ Radial/Tangential	510	490

CS-692

AA 193 41

Rev. No. 08

PAGE 4 OF 6

CORPORATE PURCHASE SPECIFICATION



Yield strength min, N/mm ²	Longitudinal/ Transverse/ Radial/Tangential	295	275
Elongation on 5.65 $\sqrt{S_0}$ gauge length percent, min	Longitudinal Transverse Radial Tangential	17 9 11 13	15 7 9 11
*Hardness, Brinell, HB	—	143 - 197	143 - 197
Charpy Impact Value (2mm, U-Notch) min., Joules	Longitudinal Transverse Radial Tangential	31 16 19 24	25 13 16 20

* **Note:** Hardness test can be conducted only, when tensile test can not be performed.

13.0 ULTRASONIC TEST:

Each forging shall be tested ultrasonically in accordance with BHEL standard AA 085 01 18 to ensure freedom from internal defects. The norms of acceptance shall be as per Category 2 of the above standard.

14.0 ADDITIONAL TESTS:

If specified in the drawing/order, the following tests shall be conducted:

- i) Magnetic particle test.
- ii) Any other tests.

Norms and acceptance shall be as specified in the drawing/order.

15.0 SCOPE OF THIRD PARTY INSPECTION:

Wherever, separate quality plan is not attached, the scope of third party inspection shall be as follows:

1. Review of supplier's declared chemical composition.
2. Selection of test samples for mechanical tests and witness of mechanical tests.
3. Witness of Non-destructive tests as applicable.
4. Review of HT charts.
5. Dimensional inspection.

16.0 TEST CERTIFICATES:

Three copies of test certificates shall be supplied unless otherwise stated in the order, preferably in the test certificate format annexed to this specification (Annexure-1).

CS-692



CORPORATE PURCHASE SPECIFICATION

AA 193 41

Rev. No. 08

PAGE 5 OF 6

In addition, the supplier shall ensure to enclose one copy of the test certificate along with their despatch documents to facilitate quick clearance of the material.

The test certificate shall bear the following Information.

Dimensional Inspection.

Details of heat treatment.

Reduction ratio

Chemical composition including trace elements.

Results of mechanical tests.

Results of ultrasonic test.

Results of additional tests called for in the order/drawing.

17.0 PACKING AND MARKING:

Forgings shall be suitably packed to prevent corrosion and damage during transit. Machined surfaces shall be properly protected with anti-corrosive compounds. Each package or forging (when supplied separately) shall be legibly marked with the following Information:

AA 19341 : 1.5% Manganese Steel Forgings, Material Grade.:20C15

BHEL Order No.

Consignment/Identification No.

Weight.

Batch No.

Supplier/s name

18.0 REFERRED STANDARDS (Latest Publications Including Amendments):

1. AA 085 01 18

2. IS: 1499

3. IS: 1500

4 IS: 1608

AA 193 41

Rev. No. 08

PAGE 6 OF 6

CORPORATE PURCHASE SPECIFICATION



ANNEXURE - 1: RECOMMENDED TEST CERTIFICATE FORMAT FOR FORGINGS

SUPPLIER'S NAME AND ADDRESS TEST CERTIFICATE FOR FORGINGS											
1. Customer:						9. Reduction Ratio } Ingot to Bloom Bloom to Blank					
2. TC No. & Date:						10. Batch No.:					
3. PO No.:						11. Heat/Melt No.:					
4. Process of Melting Ingot:						12. Spec. No.:					
5. Decarburisation Process:						13. Test Bar Size & Nos.:					
6. Forging Method:						14. Supplier of the Ingot/Billet/ Bloom and TC reference.					
7. BHEL's Reference for Approval of Bloom											
8. Discard: Top _____ %; Bottom _____ %											
15. FORGINGS COVERED BY TEST CERTIFICATE											
S.No.		Drawing No. & Item No.				Description				Quantity & Weight	
16. CHEMICAL COMPOSITION (PERCENT)											
Element		C	Si	Mn	S	P					
As Per Specn.		Min.									
		Max.									
Actual Values											
17. HEAT TREATMENT (To be accompanied by Recorder Chart, Whenever called for)											
Condition		Heating Rate, °C/hr.		Temp. °C		Soaking Time, Hrs.		Cooling Rate, °C/hr		Cooling Medium	
18. MECHANICAL PROPERTIES											
		T.S. N/mm ²	Y.S. 0.5/0.2% Proof N/mm ²	% Elongation 5.65/5.0 G.L.	% RA. Min.	Hardness BHN (Min. 3 values)	Impact Value Joules	Bend Test			
								Angle of Bend	Dia of mandrel	Result	
As Per Specn.		Min.									
		Max.									
Actual Values											
19. SURFACE FINISH (When called for in the order/drg.)											
20. DIMENSIONAL INSPECTION											
21. NON-DESTRUCTIVE TESTS											
Nature of Test		Acceptance level		Instrument used		Range		Results		Any other detail	
Ultrasonic											
Radiographic											
Dye penetrant/ Magnetic Particle											
22. METALLOGRAPHIC EXAMINATION (To be conducted if called for and photo micrographs to be attached along with a report)											
Location of Sample		Etchant used		Magnification		Constituent observed		Relative %			
Microstructure		Macroetch		Inclusion Rating							
23. OTHER TESTS IF ANY (MICROSCOPIC, SULPHUR PRINTS, ETC)											
24. IDENTIFICATION OF FORGINGS AS PER PURCHASE SPEC.											
We hereby certify that the items mentioned above have been tested and inspected in our presence and are found to be in accordance with drawings, specifications and purchase order.											
SIGNATURE, NAME & SEAL OF THE INSPECTING OFFICER DATE:						SIGNATURE, NAME & SEAL OF THE CHIEF OF QUALITY CONTROL/ CHIEF METALLURGIST OF THE SUPPLIER DATE:					
INSTRUCTIONS											
a) Details of all heat treatment processes carried out should be furnished sequentially in 17.											
b) Test certificates are to be furnished as per Purchase order and specification, in A4 size preferably in transparent paper.											
c) All the entries including signature should be in block colour ink.											
d) If testing is done by outside agencies, the original TCs shall be furnished.											
e) The actual TC may run into more than one A4 size paper, if needed, to facilitate filling up of details.											

CS-692



CORPORATE STANDARD

AA 085 01 18

REV. No. 01

PAGE 1 OF 6

**ULTRASONIC TESTING, CLASSIFICATION AND ACCEPTANCE
STANDARDS FOR STEEL FORGINGS, BILLETS AND BLOOMS**

1.0 SCOPE:

This standard deals with the ultrasonic testing of steel forgings, billets and blooms. The procedure covers pulse echo direct contact manual ultrasonic flaw detection technique. This standard does not apply to austenitic steel forgings for which AA 085 0119 may be referred to.

2.0 PERSONNEL REQUIREMENT:

Personnel performing non-destructive examination and evaluation shall be qualified to the recommended practice SNT - TC - 1A or any other recognised practice.

3.0 EQUIPMENT CHARACTERISTICS:**3.1 Frequency range:**

The ultrasonic equipment shall be suitable for operating at frequencies within the range of 0.5 to 6 MHz.

3.2 Sensitivity:

The sensitivity of the equipment shall be tested to ensure that the number of full screen back wall echo is not less than that given below, when the appropriate probe is placed on the metalised surface of plastic insert of the Indian Standard reference block (IS:4904)/IIW block.

<u>Frequency range, MHz</u>	<u>Min.No. of full screen back echoes</u>
1	5
2	4
4 to 6	2

3.3 Resolution:

The resolution of the equipment and probe combined shall be such as to show separately indications of the three grooves in the IIW - VI block.

Revision:

C1.9.4 OF MOM OF WG(NDT)

Approved:

INTERPLANT STANDARDIZATION
COMMITTEE - (WG-NDT)

Rev.No. 01

Amd.No. 01

Reaffirmed

Prepared
CFFP
HARDWARIssued
CORP. R&DDt. of 1st issue
Jan '80

Dt. Jan '95

Dt. 29.10-99

Year:

AA 085 01 18

REV.No. 01

PAGE 2 OF 6

CORPORATE STANDARD

4.0 SURFACE CONDITION:

The test surface shall be free from loose scales, rust and such other extraneous material that would interfere with the ultrasonic energy transmission. In case of machined surface, it is desirable to have a surface finish of 6.25 microns or better. A gramophone record type of finish and tear produced by machining tools shall be avoided since these give rise to spurious echoes and cause probe wear.

5.0 COUPLANT:

To ensure adequate transmission of ultrasonic energy between the probe and the test object, a suitable couplant having good wetting characteristics such as oil, grease or water, ~~glycerine or cellulose paste~~ shall be used.

6.0 TESTING TECHNIQUE:

6.1 Selection of testing technique shall be made after giving due consideration to the method of manufacture and shape of the object tested. Testing technique should be such that each and every part of the object volume is scanned at least once. Successive scans shall overlap a minimum of 15% of the probe width. Uniform contact shall be maintained between probe and object and scanning speed shall not exceed 150 mm/ second. The following techniques are considered to be minimum for providing adequate coverage.

6.2 Scanning Scheme (Solid And Hollow Forgings):

Complete length of the forging shall be scanned radially from sides / cylindrical surface through 360° using longitudinal wave probe. Whenever practicable the forging shall be scanned in axial direction also. Hollow forgings, and when necessary, solid forgings also shall be scanned using appropriate shear wave probes to detect axial and radial cracks. Hollow forgings are the forgings made hollow on the press by punching or ring rolling operation.

6.3 Solid Rectangular Forgings, Billets And Blooms:

Complete length of the object shall be scanned from two adjacent faces and whenever practicable one end face using longitudinal wave probe.

6.4 Radial cracks on round sections which can not be detected by normal testing method may be subjected to other crack detection methods such as MPI.

7.0 SCANNING:7.1 Probes and Frequency:

Overall scanning shall be done using 2 MHz nominal, 20-25 mm diameter probes except when large grain size and path length make it necessary to use a lower frequency. Smaller probes may be used when necessary. However, for forgings intended for backing material for white metal lined bearings, the examination shall be carried out by 4 MHz probes.



7.2 Time Base Calibration:

The time base shall be calibrated using a calibration block or a known dimension of forging under examination.

7.3 Sensitivity:

7.3.1 When Calibrated Attenuator Is Not Available:

Reference sensitivity of equipment shall be set such that the maximum acceptable defect equivalent flat bottomed hole in the test block is equal to 75% of the full screen height. Testing shall be carried out at the highest sensitivity possible.

7.3.2 When Calibrated Attenuator Is Available:

The sensitivity of the equipment during scanning shall be set 6 dB more than the sensitivity required to give a full screen height echo from the maximum acceptable size of defect.

Note: The above sensitivity level adjustment is purely for scanning purposes. Once a defect is encountered, the sensitivity shall be brought down to estimate the size of defect for evaluation of the material under test.

8.0 ESTIMATION OF FLAW SIZE:

8.1 Large Size Flaws:

The size of large flaws can be estimated by moving the probe in all directions and plotting the midpoint of the probe when echo falls to 50 percent or 6 dB.

8.2 Small Size Flaws:

8.2.1 When Calibrated Attenuator Is Not Available:

8.2.1.1 The size of the flaw may be estimated by comparing with the echoes of the flat bottomed holes at appropriate depths in a test block of ultrasonically similar material.

8.2.1.2 The size of the flaw may also be estimated by moving probe successively in all the four directions at right angles to each other and plotting the mid point of the probe when echo height falls to 50% or 6 dB. Due allowance shall also be made for beam spread, depth and orientation of flaw and diameter of the forging if the scanning is done from the curved surface.

8.2.2 When Calibrated Attenuator Is Provided With The Equipment:

The size of the flaw (smaller than the beam spread) can be estimated accurately in millimetres of equivalent circular flaw with the help of Krautkramer's DGS (Distance - gain - size) diagram. Method of estimating flaw size using a DGS diagram is given in Annexure - A.

AA 085 01 18

REV.No. 01

PAGE 4 OF 6

CORPORATE STANDARD

**9.0 CLASSIFICATION OF FORGINGS, BILLETS AND BLOOMS:**

9.1 Forgings, billets and blooms are classified into the following five categories depending upon the defect size admissibility for the purpose of ultrasonic testing:

CategoryUnacceptable defects

- | | |
|---|--|
| 1 | <ul style="list-style-type: none"> (i) Cracks, flakes, seams & laps. (ii) Defects giving indication larger than that from a 2 mm diameter equivalent flaw. (iii) Groups of defects with maximum indication less than that from a 2 mm diameter equivalent flaw which cannot be separated at testing sensitivity if the back echo is reduced to less than 70%. (iv) Defects giving indications of 1 to 2 mm diameter equivalent flaw separated by a distance less than four times the size of the larger of the adjacent flaws. |
| 2 | <ul style="list-style-type: none"> (i) Cracks, flakes, seams & laps. (ii) Defects giving indication larger than that from a 4 mm diameter equivalent flaw. (iii) Groups of defects with maximum indication less than that from a 4 mm diameter equivalent flaw which cannot be separated at testing sensitivity if the back echo is reduced to less than 50%. (iv) Defects giving indications of 2 to 4 mm diameter equivalent flaw separated by a distance less than four times the size of the larger of the adjacent flaws. |
| 3 | <ul style="list-style-type: none"> (i) Cracks, flakes, seams & laps. (ii) Defects giving indication larger than that from a 6 mm diameter equivalent flaw. (iii) Groups of defects with maximum indication less than that from a 6 mm diameter equivalent flaw which cannot be separated at testing sensitivity if the back echo is reduced to less than 40%. (iv) Defects giving indications of 3 to 6 mm diameter equivalent flaw separated by a distance less than four times the size of the larger of the adjacent flaws. |
| 4 | <ul style="list-style-type: none"> (i) Cracks, flakes, seams & laps. (ii) Defects giving indication larger than that from a 10 mm diameter equivalent flaw. (iii) Groups of defects with maximum indication less than that from a 10 mm diameter equivalent flaw which cannot be separated at testing sensitivity if the back echo is reduced to less than 20%. |

- (iv) Defects giving indications of 5 to 10 mm diameter equivalent flaw separated by a distance less than four times the size of the larger of the adjacent flaws.
- 5 (i) Cracks, flakes, seams & laps.
- (ii) Defects giving indication larger than that from a 15 mm diameter equivalent flaw.
- (iii) Groups of defects with maximum indication less than that from a 15 mm diameter equivalent flaw which cannot be separated at testing sensitivity if the back echo is reduced to less than 10%.

Note: Loss of back wall echo not attributable to the presence of defects or geometry and exceeding the limits mentioned in item (iii) of each category of unacceptable defects shall be a cause for rejection.

ANNEXURE - A

The equivalent flaw size curves of the DGS diagram is prepared by plotting the amplitude in decibels from a series of circular reflectors with increasing distance from the probe in water and so the graph incorporates only the loss in water. When it is found that the attenuation in the material under test is more (this can be checked using back echo curve of DGS diagram), this shall be taken into account while calculating the flaw size. Corrections will not be required for majority of heat treated forgings when tested with 2-4 MHz probes.

A step by step method of estimating flaw size using universal DGS diagram is given below:

- (a) Adjust the depth range of the equipment to the required depth.
- (b) Adjust the back echo to 70% of screen height from a defect free area parallel wall of the material under test or ultrasonically similar test block and note the dB value (A) on the calibrated gain control.
- (c) Mark on the back echo curve of the diagram, the back wall of the distance in terms of near field in millimetres in the case of universal DGS diagram.
- (d) Move the probe to the defective area and get the maximum defect echo. Read off the flaw depth. Increase the gain with the calibrated gain control until echo height reaches 70% of screen height. Note the attenuator reading in dB (B).
- (e) Calculate the gain (G) in dB by subtracting 'A' from 'B'. Count off the gain 'G' downwards from the marked point on the back echo curve, and then move horizontally to intersect the vertical line from the base line corresponding to the flaw depth 'D' in terms of near field in the case of universal diagram.

AA 085 01 18

REV.No. 01

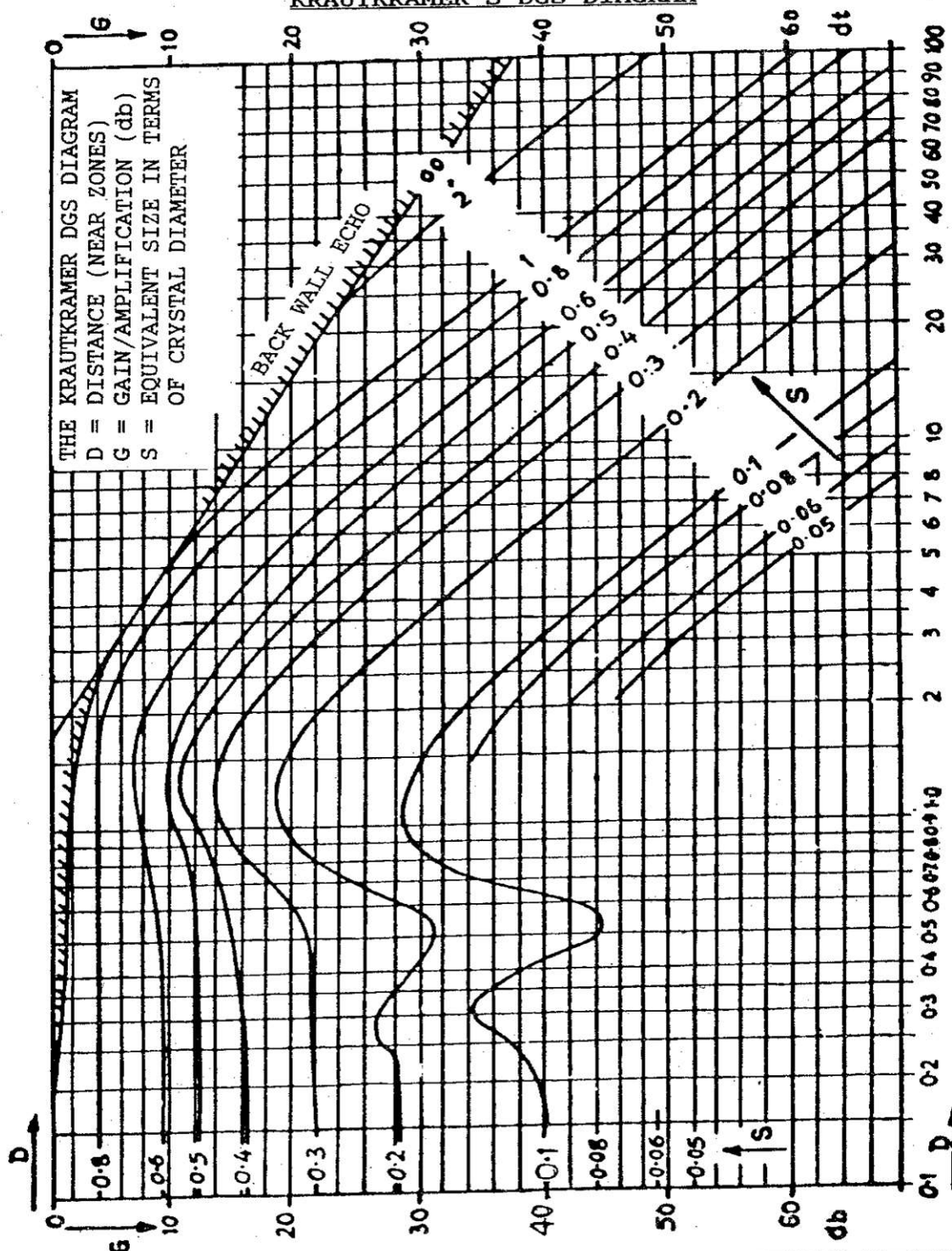
PAGE 6 OF 6

CORPORATE STANDARD



- (f) Note the equivalent flaw size curve passing through the above point. Multiply the reduced flaw dimension (S) of the curve by the probe diameter to give the equivalent flaw size in millimetres.

ANNEXURE - A
KRAUTKRAMER'S DGS DIAGRAM



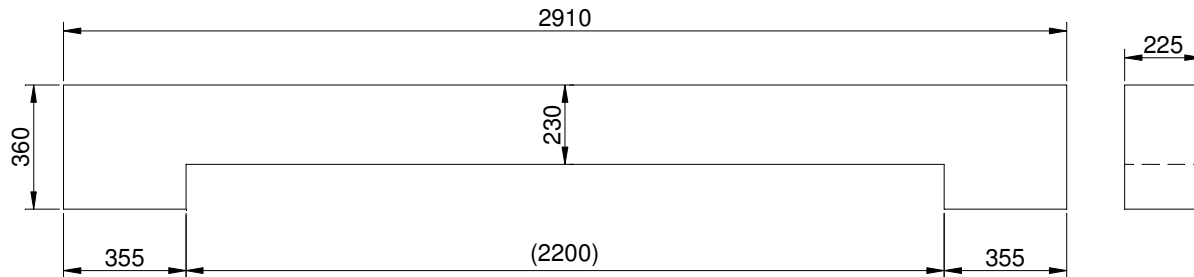
(Drawing)

(41074258998 REV: 01)

FIRST ANGLE PROJECTION

(ALL DIMENSIONS ARE IN mm) FORM DG 39(B)

REV	DATE	ALTERED	REV	DATE	ALTERED RAJPAL sd/-	GMS No.-/ C.B.O.M.- NO. 0-10742-58000	STATUS OF DRG U	
		CHECKED			01			01.06.24
ZONE			ZONE	DRAWING SUPERSEDES UNDER THE SAME NUMBER. C/A No.: MTE-24-F0008	AGREED DEPT	NAME	SIGN	DATE
					WTX	SUSHANT	sd/-	12.08.23
					STE TTX	DINESH GOND SS. ORAON	sd/-	14.08.23 16.08.23
GRADE OF UNTOL.DIM M/CG. C/M/F -AA0230208					WELDING A/B/C/D AA0621104	GAS CUTTING-T3 AA0621101		

12.5/ALL OVER EXCEPT
OTHERWISE STATED

- FORGING SHALL BE SUPPLIED IN CONFORMITY WITH THE PURCHASING SPECIFICATION NO. AA19341.
- TOLERANCES :- OUT SIDE DIMENSIONS : +2
IN SIDE DIMENSIONS : -2
- IDENTIFICATION MARKING SHALL BE DONE AT THE PLACE MARKED XXXX.


3-10742-58102
Ref. Drawing No.

W95310742093

AA19341

BHARAT HEAVY ELECTRICALS LTD.
RANIPUR, HARDWAR

	NAME	SIGN	DATE	NO. OF VAR —
DRN	RAJPAL	sd/—	01.08.23	
CHD	SUBODH RANA	sd/—	01.08.23	
APPD	ASHISH RANJAN	sd/—	14.08.23	

DEPT	MTE		SCALE	WEIGHT (KG)	REF. TO ASSY. DRG.	ITEM No.	NO. OF ITEMS
CODE	4300		NTS	1344.0	-----	—	—
TITLE : FORGING FOR JOINT FLANGE (R/M)				CARD CODE	DRAWING NO.		—
				—	4-10742-58998		—
					SHEET No. 01		No. OF SHEETS 01

A4 SIZE

Buyer Added Bid Specific Additional Terms & Conditions (ATC)

1	<p>SCOPE OF SUPPLY: Supply of goods to HEEP BHEL Haridwar, on F.O.R. Destination Basis. Specification is as per Buyer Specification Document. Unloading of materials at Destination shall be in BHEL's scope.</p>
2	<p>PRICE BASIS: Price in INR (Including all cost components) should be quoted for F.O.R. HEEP BHEL Haridwar GSTIN : 05AAACB4146P1ZL</p>
3	<p>INSPECTION / INSPECTION & TESTING AT SUPPLIERS WORKS: BHEL reserves the right to inspect the material during manufacturing and also to get tested the material under dispatch from third party. The test results of third party test shall be final and binding on the Supplier/Vendor. BHEL will reserve the right to inspect/test the material during/after manufacturing at suppliers' works, and/or at BHEL Site. In case of rejection at any stage, Supplier/Vendor shall be liable to replace the materials at his own cost.</p>
4	<p>TAXES & DUTIES: 4.1 The Supplier/Vendor shall pay all (save the specific exclusions as enumerated in this clause) taxes, fees, license, charges, deposits, duties, tools, royalty, commissions, other charges, etc. which may be levied on the input goods & services consumed and output goods & services delivered in course of his operations in executing the contract. In case BHEL is forced to pay any of such taxes/duties, BHEL shall have the right to recover the same from his bills or otherwise as deemed fit along with the applicable overheads @5% and interest on the total value (i. e. amount paid by BHEL + overhead) However, provisions regarding GST on output supply (goods/service) and TDS/TCS as per Income Tax Act shall be as per following clauses. 4.2 GST (Goods and Services Tax) 4.2.1 Reimbursement of GST is subject to compliance of following terms and conditions. BHEL shall have the right to deny payment of GST and to recover any loss to BHEL on account of tax, interest, penalty etc. for non-compliance of any of the following condition. 4.2.2 The admissibility of GST, taxes and duties referred in this chapter or elsewhere in the contract shall be limited to direct transactions between BHEL & its Supplier/Vendor. BHEL shall not consider GST on any transaction other than the direct transaction between BHEL & its Supplier/Vendor. 4.2.3 Supplier/Vendor shall obtain prior written consent of BHEL before billing the amount towards such taxes. Where the GST laws permit more than one option or methodology for discharging the liability of tax/levy/duty, BHEL shall have the right to adopt the appropriate one considering the amount of tax liability on BHEL/Client as well as procedural simplicity with regard to assessment of the liability. The option chosen by BHEL shall be binding on the Contractor for discharging the obligation of BHEL in respect of the tax liability to the Supplier/Vendor. 4.2.4 Supplier/Vendor has to submit GST registration certificate of the concerned state. Supplier/Vendor also needs to ensure that the submitted GST registration certificate should be in active status during the entire contract period. 4.2.5 Supplier/Vendor has to issue Invoice/Debit Note/Credit Note indicating HSN/SAC code, Description, Value, Rate, applicable tax and other particulars in compliance with the provisions of relevant GST Act and Rules made thereunder.</p>

4.2.6 Supplier/Vendor has to submit GST compliant invoice within the due date of invoice as per GST Law. In case of delay, BHEL reserves the right of denial of GST payment if there occurs any hardship to BHEL in claiming the input thereof. In case of goods, Supplier/Vendor has to provide scan copy of invoice & GR/LR/RR to BHEL before movement of goods starts to enable BHEL to meet its GST related compliances. Special care should be taken in case of month end transactions.

4.2.7 Supplier/Vendor has to ensure that invoice in respect of such services which have been provided/completed on or before end of the month should not bear the date later than last working day of the month in which services are performed.

4.2.8 Subject to other provisions of the contract, GST amount claimed in the invoice shall be released on fulfilment of all the following conditions by the Supplier/Vendor: -

a) Supply of goods and/or services have been received by BHEL.

b) Original Tax Invoice has been submitted to BHEL.

c) Supplier/Vendor has submitted all the documents required for processing of bill as per contract/ purchase order/ work order.

d) In cases where e-invoicing provision is applicable, Supplier/Vendor is required to submit invoice in compliance with e-invoicing provisions of GST Act and Rules made thereunder.

e) Supplier/Vendor has filed all the relevant GST return (e.g. GSTR-1, GSTR-3B, etc.) pertaining to the invoice submitted and submit the proof of such return along with immediate subsequent invoice. In case of final invoice/ bill, contractor has to submit proof of such return within fifteen days from the due date of relevant return.

f) Respective invoice has appeared in BHEL's GSTR - 2A for the month corresponding to the month of invoice and in GSTR-2B of the month in which such invoices has been reported by the contractor along with status of ITC availability as "YES" in GSTR-2B. Alternatively, BG of appropriate value may be furnished which shall be valid at least one month beyond the due date of confirmation of relevant payment of GST on GSTN portal or sufficient security is available to adjust the financial impact in case of any default by the Supplier/Vendor.

g) Supplier/Vendor has to submit an undertaking confirming the payment of all due GST in respect of invoices pertaining to BHEL.

4.2.9 Any financial loss arises to BHEL on account of failure or delay in submission of any document as per contract/purchase order/work order at the time of submission of Tax invoice to BHEL, shall be deducted from Supplier/Vendor's bill or otherwise as deemed fit.

4.2.10 TDS as applicable under GST law shall be deducted from Supplier/Vendor's bill.

4.2.11 Supplier/Vendor shall comply with the provisions of e-way bill wherever applicable. Further wherever provisions of GST Act permits, all the e-way bills , road permits etc. required for transportation of goods needs to be arranged by the contractor.

4.2.12 Supplier/Vendor shall be solely responsible for discharging his GST liability according to the provisions of GST Law and BHEL will not entertain any claim of GST/interest/penalty or any other liability on account of failure of Supplier/Vendor in complying the provisions of GST Law or discharging the GST liability in a manner laid down thereunder.

4.2.13 In case declaration of any invoice is delayed by the vendor in his GST return or any invoice is subsequently amended/alterd/deleted on GSTN portal which results in any adverse financial implication on BHEL, the financial impact thereof including interest/penalty shall be recovered from the Supplier/Vendor's due payment.

	<p>4.2.14 Any denial of input credit to BHEL or arising of any tax liability on BHEL due to non-compliance of GST Law by the Supplier/Vendor in any manner, will be recovered along with liability on account of interest and penalty (if any) from the payments due to the Supplier/Vendor.</p> <p>4.2.15 In the event of any ambiguity in GST law with respect to availability of input credit of GST charged on the invoice raised by the contractor or with respect to any other matter having impact on BHEL, BHEL's decision shall be final and binding on the Supplier/Vendor.</p> <p>4.2.16 Variation in Taxes & Duties: Any upward variation in GST shall be considered for reimbursement provided supply of goods and services are made within schedule date stipulated in the contract or approved extended schedule for the reason solely attributable to BHEL. However downward variation shall be subject to adjustment as per actual GST applicability. In case the Government imposes any new levy/tax on the output service/goods after price bid opening, the same shall be reimbursed by BHEL at actual. The reimbursement under this clause is restricted to the direct transaction between BHEL and its Supplier/Vendor only and within the contractual delivery period only. In case any new tax/levy/duty etc. becomes applicable after the date of Bidder's offer but before opening of the price Bid, the Bidder/ Supplier/Vendor must convey its impact on his price duly substantiated by documentary evidence in support of the same before opening of price bid. Claim for any such impact after opening the price bid will not be considered by BHEL for reimbursement of tax or reassessment of offer.</p> <p>4.3 Income Tax: TDS/TCS as applicable under Income Tax Act, 1961 or rules made thereunder shall be deducted/collected from Supplier/Vendor's bill.</p>						
5	<p>DELIVERY: As per Buyer Specification Document/ Bid document (Supply of material shall commence immediately & completed within delivery period as per buyer specification document/ Bid document.)</p> <p>NOTE:</p> <ol style="list-style-type: none"> 1. If the delivery of supply as detailed above gets delayed beyond the delivery period, the Supplier/Vendor shall request for a delivery extension and BHEL at its discretion may extend the Contract. However, if any 'Delivery extension' is granted to the Supplier/Vendor for completion of supply, due to backlog attributable to the Supplier/Vendor, then it shall be without prejudice to the rights of BHEL to impose LD for the delays attributable to the Supplier/Vendor. 						
6	<p>TRANSIT INSURANCE: Transit Insurance of material is in Supplier/Vendor's scope. Supplier/Vendor shall insure the material at their cost for transportation.</p>						
7	<p>PAYMENT TERMS: The payment shall be made within no. of days as defined in the below table from appointed day.</p> <table border="1"> <thead> <tr> <th>Type of Bidder</th><th>Within Number of Days</th></tr> </thead> <tbody> <tr> <td>Micro & Small Enterprises (MSEs)</td><td>45 days</td></tr> <tr> <td>Medium Enterprises</td><td>60 days</td></tr> </tbody> </table>	Type of Bidder	Within Number of Days	Micro & Small Enterprises (MSEs)	45 days	Medium Enterprises	60 days
Type of Bidder	Within Number of Days						
Micro & Small Enterprises (MSEs)	45 days						
Medium Enterprises	60 days						

	Non MSME	90 days
	<p>Appointed day means</p> <ul style="list-style-type: none"> • The day of delivery of material i.e. C-Note Date, subject to submission of non-discrepant documents by vendor as per Purchase Order. <p>or</p> <ul style="list-style-type: none"> • Where there is any objection regarding acceptance of goods, the same shall be informed to supplier within fifteen days from the day of the delivery of good. Appointed day will be the day on which such objection is removed by the supplier. • For BOIs, the appointed day means the date of receipt of material at respective project Site (i.e. MRC date). 	
8	<p>DOCUMENTS REQUIRED ALONG WITH DISPATCH OF MATERIAL/BILLING DOCUMENTS:</p> <p>The following documents are required to be sent with material dispatch/Billing Documents:</p> <ul style="list-style-type: none"> • Original Tax Invoice (As per Cl. No. 4 above). • Copy of LR/GR. • Test Certificate in Original • Warranty/Guarantee Certificate. • Pre-despatch inspection documents/test reports, NDT reports if any as per PO • GST compliance certificate • Any other relevant document <p>The above documents (hard copies) are also required to be sent to Purchase section at the following address:</p> <p>Sr. Manager (PPX-F) 4th Floor, Main Administrative Building, Heavy Electricals Equipment Plant, BHEL, Haridwar, Uttarakhand-249403</p>	
9	<p>BANK DETAILS FOR EMD & PERFORMANCE SECURITY SUBMISSION:</p> <p>For Electronic Fund Transfer the details are as below:</p> <p>a) Name of the Beneficiary: Bharat Heavy Electricals Limited</p> <p>b) Bank Particulars:</p> <p>Name of the Company - BHARAT HEAVY ELECTRICALS LTD. Address of the company - BHARAT HEAVY ELECTRICALS LIMITED, HEEP, HARIDWAR Name of the bank - STATE BANK OF INDIA Bank branch - BHEL MAIN GATE, SECTOR-5, RANIPUR, HARIDWAR, UTTARAKHAND, INDIA-249403 Branch code - Account Number – 10667995458 Account type – Current A/C IFSC code - SBIN0000586</p>	

	MICR code – 249002005
9	EMD: Not Applicable.
10	PERFORMANCE SECURITY: Not Applicable.
11	<p>BREACH OF CONTRACT, REMEDIES AND TERMINATION:</p> <p>11.1 The following shall amount to breach of contract:</p> <p>I. Non-supply of material/ non-completion of work by the Supplier/Vendor within scheduled delivery/ completion period as per contract or as extended from time to time.</p> <p>II. The Supplier/Vendor fails to perform as per the activity schedule and there are sufficient reasons even before expiry of the delivery/ completion period to justify that supplies shall be inordinately delayed beyond contractual delivery/ completion period.</p> <p>III. The Supplier/Vendor delivers equipment/ material not of the contracted quality.</p> <p>IV. The Supplier/Vendor fails to replace the defective equipment/ material/ component as per guarantee clause.</p> <p>V. Withdrawal from or abandonment of the work by the Supplier/Vendor before completion as per contract.</p> <p>VI. Assignment, transfer, subletting of Contract by the Supplier/Vendor without BHEL's written permission resulting in termination of Contract or part thereof by BHEL.</p> <p>VII. Non-compliance to any contractual condition or any other default attributable to Supplier/Vendor.</p> <p>VIII. Any other reason(s) attributable to Vendor towards failure of performance of contract. In case of breach of contract, BHEL shall have the right to terminate the Purchase Order/ Contract either in whole or in part thereof without any compensation to the Supplier/Vendor.</p> <p>IX. Any of the declarations furnished by the contractor at the time of bidding and/ or entering into the contract for supply are found untruthful and such declarations were of a nature that could have resulted in non-award of contract to the contractor or could expose BHEL and/ or Owner to adverse consequences, financial or otherwise.</p> <p>X. Supplier/Vendor is convicted of any offence involving corrupt business practices, antinational activities or any such offence that compromises the business ethics of BHEL, in violation of the Integrity Pact entered into with BHEL has the potential to harm the overall business of BHEL/ Owner.</p> <p>11.2 Remedies in case of Breach of Contract.</p> <p>i) Wherein the period as stipulated in the notice issued under clause 14.1 has expired and Supplier/Vendor has failed to remedy the breach, BHEL will have the right to terminate the contract on the ground of "Breach of Contract" without any further notice to contractor.</p> <p>ii) Upon termination of contract, BHEL shall be entitled to recover an amount equivalent to 10% of the Contract Value for the damages on account of breach of contract committed by the Supplier/Vendor. This amount shall be recovered by way of encashing the security instruments like performance bank guarantee etc available</p>

with BHEL against the said contract. In case the value of the security instruments available is less than 10% of the contract value, the balance amount shall be recovered from other financial remedies (i.e. available bills of the Supplier/Vendor, retention amount, from the money due to the Supplier/Vendor etc. with BHEL) or the other legal remedies shall be pursued.

iii) wherever the value of security instruments like performance bank guarantee available with BHEL against the said contract is 10% of the contract value or more, such security instruments to the extent of 10% contract value will be encashed. In case no security instruments are available or the value of the security instruments available is less than 10% of the contract value, the 10% of the contract value or the balance amount, as the case may be, will be recovered in all or any of the following manners:

iv) In case the amount recovered under sub clause (a) above is not sufficient to fulfil the amount recoverable then; a demand notice to deposit the balance amount within 30 days shall be issued to Supplier/Vendor.

v) If Supplier/Vendor fails to deposit the balance amount within the period as prescribed in demand notice, following action shall be taken for recovery of the balance amount:

a) from dues available in the form of Bills payable to defaulted Supplier/Vendor against the same contract.

b) If it is not possible to recover the dues available from the same contract or dues are insufficient to meet the recoverable amount, balance amount shall be recovered from any money(s) payable to Supplier/Vendor under any contract with other Units of BHEL including recovery from security deposits or any other deposit available in the form of security instruments of any kind against Security deposit or EMD.

vi) In-case recoveries are not possible with any of the above available options, Legal action shall be initiated for recovery against defaulted supplier/Vendor.

vii) It is an agreed term of contract that this amount shall be a genuine pre-estimate of damages that BHEL would incur in completion of balance contractual obligation of the contract through any other agency and BHEL will not be required to furnish any other evidence to the Supplier/Vendor for the purpose of estimation of damages.

viii) In addition to the above, imposition of liquidated damages, debarment, termination, de-scoping, short-closure, etc., shall be applied as per provisions of the contract.

Note:

1) The defaulting Supplier/Vendor shall not be eligible for participation in any of the future enquiries floated by BHEL to complete the balance work. The defaulting contractor shall mean and include:

(a) In case defaulted Supplier/Vendor is the Sole Proprietorship Firm, any Sole Proprietorship Firm owned by same Sole Proprietor.

(b) In case defaulted Supplier/Vendor is The Partnership Firm, any firm comprising of same partners/ some of the same partners ; or sole proprietorship firm owned by any partner(s) as a sole proprietor.

LD against delay in executed supply in case of Termination of Contract:

LD against delay in executed supply shall be calculated in line with LD clause no. 18.0 below, for the delay attributable to Supplier/Vendor. For limiting the maximum value

	<p>of LD, contract value shall be taken as Executed Value of supply till termination of contract.</p> <p>Method for calculation of “LD against delay in executed supply in case of termination of contract” is given below.</p> <p>i. Let the time period from scheduled date of start of supply till termination of contract excluding the period of Hold (if any) not attributable to contractor = T1</p> <p>ii. Let the value of executed supply till the time of termination of contract= X</p> <p>iii. Let the Total Executable Value of supply for which inputs/fronTS were made available to Supplier/Vendor and were planned for execution till termination of contract = Y</p> <p>iv. Delay in executed supply attributable to Supplier/Vendor i.e. $T2=[1-(X/Y)] \times T1$</p> <p>v. LD shall be calculated in line with LD clause (clause 18.0) of the Contract for the delay attributable to Supplier/Vendor taking “X” as Contract Value and “T2” as period of delay attributable to Supplier/Vendor.</p>												
12	<p>GUARANTEE/WARRANTY:</p> <p>Goods shall comply with the specifications for material, workmanship and performance.</p> <p>Guarantee period for Supply of tender items shall be 18 calendar months from the date of dispatch.</p>												
13	<p>MICRO AND SMALL ENTERPRISES (MSE):</p> <p>Any Bidder falling under MSE category shall furnish the following details & submit documentary evidence/ Govt. Certificate etc. in support of the same along with their techno-commercial offer.</p> <table><tr><th>Type under MSE</th><th>SC/ST Owned</th><th>Women Owned</th><th>Others (excluding SC/ST & Women owned)</th></tr><tr><td>Micro</td><td></td><td></td><td></td></tr><tr><td>Small</td><td></td><td></td><td></td></tr></table> <p>Note: If the bidder does not furnish the above, offer shall be processed construing that the bidder is not falling under MSE category.</p> <p>a) MSE suppliers can avail the intended benefits in respect of the procurements related to the Goods and Services only (Definition of Goods and Services as enumerated by Govt. of India vide Office Memorandum F. No. 21(8)/2011-MA dtd. 09/11/2016 office of AS & DC, MSME) only if they submit along with the offer, attested copies of either Udyam Registration. Date to be reckoned for determining the deemed validity will be the last date of Technical Bid submission. Non-submission of supporting document in GeM portal will lead to consideration of their bids at par with other bidders. No benefits shall be applicable for this enquiry if the above required documents are not uploaded at the time of bid submission. Documents submitted by the bidder shall be verified by BHEL for rendering the applicable benefits.</p>	Type under MSE	SC/ST Owned	Women Owned	Others (excluding SC/ST & Women owned)	Micro				Small			
Type under MSE	SC/ST Owned	Women Owned	Others (excluding SC/ST & Women owned)										
Micro													
Small													
14	<p>LIQUIDATED DAMAGE:</p>												

	<p>Liquidated Damages, wherever referred under this Tender/Agreement, shall mean and refer to the damages, not in the nature of penalty, which the contractor agrees to pay in the event of delay in delivery of supplies, breach of contract etc. as the case may be. Liquidated Damages leviable upon the Supplier/Vendor is a sum which is agreed by the parties as a reasonable and genuine pre-estimate of damages which will be suffered by BHEL on account of delay/breach on the part of the Supplier/Vendor.</p> <p>If the Seller/Service Provider fails to deliver any or all of the Goods/Services within the original/re-fixed delivery period(s) specified in the contract/PO, the Buyer/BHEL will be entitled to deduct/recover the Liquidated Damages for the delay, unless covered under Force Majeure conditions aforesaid, @ 0.5% of the contract value of delayed quantity per week or part of the week of delayed period as pre-estimated damages not exceeding 10% of the contract value of delayed quantity without any controversy/dispute of any sort whatsoever. This is in line with GeM GTC.</p>
15	INTEGRITY PACT: Not Applicable
16	<p>PREFERENCE TO MAKE IN INDIA: For this procurement, the local content to categorize a supplier as a Class I local supplier/ Class II local Supplier/ Non-local supplier and purchase preference to Class I local supplier, is as defined in Public Procurement (Preference to Make in India), Order 2017 dated 19.07.2024 issued by DPIIT. In case of subsequent orders issued by the nodal ministry, changing the definition of local content for the items of the NIT, the same shall be applicable even if issued after issue of this NIT, but before opening of Part-II bids against this NIT.</p> <p>16.1 Compliance to Restrictions under Rule 144 (xi) of GFR 2017: I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. The Competent Authority for the purpose of this Clause shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).</p> <p>II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.</p> <p>III. "Bidder from a country which shares a land border with India" for the purpose of this Clause means:-</p> <ol style="list-style-type: none"> An entity incorporated established or registered in such a country; or A subsidiary of an entity incorporated established or registered in such a country; or An entity substantially controlled through entities incorporated, established or registered in such a country; or An entity whose beneficial owner is situated in such a country; or An Indian (or other) agent of such an entity; or A natural person who is a citizen of such a country; or A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

	<p>IV. The beneficial owner for the purpose of (III) above will be as under:</p> <p>1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.</p> <p>Explanation:</p> <p>a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent of shares or capital or profits of the company.</p> <p>b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements.</p> <p>2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership.</p> <p>3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person has ownership of or entitlement to more than fifteen percent of the property or capital or profits of the such association or body of individuals.</p> <p>4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;</p> <p>5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.</p> <p>V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.</p> <p>Note: (i) The bidder shall provide undertaking for their compliance to this Clause, in the format provided.</p> <p>(ii) Registration of the bidder with Competent Authority should be valid at the time of submission of bids and at the time of acceptance of the bids.</p>
17	<p>SPECIAL CONDITIONS:</p> <p>a. Benefits of MSE (such as EMD Waiver, Tender fee exemption, Price preference, Payment preference etc.) will be given only to those MSE Vendors who are manufacturers of offered items against the NIT. No MSE benefits shall be provided to Agents / Stockiest / Dealers / Traders etc. for the items offered but not manufactured by themselves.</p> <p>b. Deviations (Technical or Commercial), <u>if any, must be mentioned explicitly in your offer (Part-I). If not mentioned, it will be construed that no deviations are there in your offer w.r.t. the tender.</u></p>

18	<p>Settlement of Dispute</p> <p>If any dispute or difference of any kind whatsoever shall arise between BHEL and the Supplier/Vendor, arising out of the contract for the performance of the work whether during the progress of contract termination, abandonment or breach of the contract, it shall in the first place referred to Designated Engineer for amicable resolution by the parties. Designated Engineer (to be nominated by BHEL for settlement of disputes arising out of the contract) who within 60 days after being requested shall give written notice of his decision to the contractor. Save as hereinafter provided, such decision in respect of every matter so referred shall forthwith be given effect to by the Supplier/Vendor who shall proceed with the work with all due diligence, whether he or BHEL desires to resolve the dispute as hereinafter provided or not.</p> <p>If after the Designated Engineer has given written notice of this decision to the party and no intention to pursue the dispute has been communicated to him by the affected party within 30 days from the receipt of such notice, the said decision shall become final and binding on the parties. In the event the Supplier/Vendor being dissatisfied with any such decision or if amicable settlement cannot be reached then all such disputed issues shall be resolved through conciliation in terms of the BHEL Conciliation Scheme 2018 as per Clause 18.1.</p> <p>18.1 Conciliation:</p> <p>Any dispute, difference or controversy of whatever nature howsoever arising under or out of or in relation to this Agreement (including its interpretation) between the Parties, and so notified in writing by either Party to the other Party (the “Dispute”) shall, in the first instance, be attempted to be resolved amicably in accordance with the conciliation procedure as per BHEL Conciliation Scheme 2018. The proceedings of Conciliation shall broadly be governed by Part-III of the Arbitration and Conciliation Act 1996 or any statutory modification thereof and as provided in - “Procedure for conduct of conciliation proceedings” (as available in www.bhel.com)).</p> <p>Note: Ministry of Finance has issued OM reference No. 1/2/24 dated 03.06.2024 regarding “Guidelines for Arbitration and Mediation in Contracts of Domestic Public Procurement. In the said OM it has been recommended that Government departments/ Entities/agencies are to encourage mediation under the Mediation Act. 2023. The said Act has not yet been notified by the Government. Therefore, the clause “Settlement of Disputes” shall be modified accordingly as and when the Mediation Act 2023 gets notified.</p> <p>18.2 ARBITRATION:</p> <p>18.2.1 Except as provided elsewhere in this Contract, in case Parties are unable to reach amicable settlement (whether by Conciliation to be conducted as provided herein above or otherwise) in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or, in relation to interpretation of any provision of the Contract; or. in any manner touching upon the Contract (hereinafter referred to as the ‘Dispute’), then, either Party may, refer the disputes to ‘Delhi International Arbitration Centre’ and such dispute to be adjudicated by Sole Arbitrator appointed in accordance with the Rules of said Arbitral Institution.</p> <p>18.2.2 A party willing to commence arbitration proceeding shall invoke Arbitration Clause by giving notice to the other party in terms of section 21 of the Arbitration & Conciliation Act, 1996 (hereinafter referred to as the ‘Notice’) before referring the matter to arbitral institution. The Notice shall be addressed to the Head of the Region, Power Sector/ Unit,</p>
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BHEL, executing the Contract and shall contain the particulars of all claims to be referred to arbitration with sufficient detail and shall also indicate the monetary amount of such claim including interest, if any.

18.2.3 After expiry of 30 days from the date of receipt of aforesaid notice, the party invoking the Arbitration shall submit that dispute to the Arbitral Institution: Delhi International Arbitration Centre and that dispute shall be adjudicated in accordance with their respective Arbitration Rules. The matter shall be adjudicated by a Sole Arbitrator who shall necessarily be a Retd Judge having considerable experience in commercial matters to be appointed/nominated by the respective institution. The cost/expenses pertaining to the said Arbitration shall also be governed in accordance with the Rules of the respective Arbitral Institution. The decision of the party invoking the Arbitration for reference of dispute to a specific Arbitral institution for adjudication of that dispute shall be final and binding on both the parties and shall not be subject to any change thereafter. The institution once selected at the time of invocation of dispute shall remain unchanged.

18.2.4 The fee and expenses shall be borne by the parties as per the Arbitral Institutional rules.

18.2.5 The Arbitration proceedings shall be in English language and the seat and venue of Arbitration shall be 'Delhi International Arbitration Centre' .

18.2.6 Subject to the above, the provisions of Arbitration & Conciliation Act 1996 and any amendment thereof shall be applicable. All matters relating to this Contract and arising out of invocation of Arbitration clause are subject to the exclusive jurisdiction of the Court(s) situated at Haridwar.

18.2.7 Notwithstanding any reference to the Designated Engineer or Conciliation or Arbitration herein, a. the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree. Settlement of Dispute clause cannot be invoked by the Contractor, if the Contract has been mutually closed or 'No Demand Certificate' has been furnished by the Contractor or any Settlement Agreement has been signed between the Employer and the Contractor.

18.2.8 It is agreed that Mechanism of resolution of disputes through arbitration shall be available only in the cases where the value of the dispute is less than Rs. 10 Crores.

18.2.9 In case the disputed amount (Claim, Counter claim including. interest is Rs. 10 crores and above, the parties shall be within their rights to take recourse to remedies other than Arbitration, as may be available to them under the applicable laws after prior intimation to the other party. Subject to the aforesaid conditions, provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications or re-enactment thereof as amended from time to time, shall apply to the arbitration proceedings under this clause.

18.2.10 In case, multiple arbitrations are invoked (whether sub-judice or arbitral award passed) by any party to under this contract, then the cumulative value of claims (including interest claimed or awarded) in all such arbitrations shall be taken in account while arriving at the total claim in dispute for the subject contract for the purpose of above clause. Disputes having cumulative value of less than 10 crores shall be resolved through arbitration and any additional dispute shall be adjudicated by the court of competent jurisdiction.

	<p>18.3 In case of Contract with Public Sector Enterprise (PSE) or a Government Department, the following shall be applicable:</p> <p>In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs)/ Port Trusts inter se and also between CPSEs and Government Departments/Organizations (excluding disputes concerning Railways, Income Tax, Customs & Excise Departments), such dispute or difference shall be taken up by either party for resolution through AMRCD (Administrative Mechanism for Resolution of CPSEs Disputes) as mentioned in DPE OM No. 05/0003/2019-FTS-10937 dated 14-12-2022 as amended from time to time.</p>
19	<p>JURISDICTION</p> <p>Subject to above mentioned clause 18 of this contract, the Civil Court having original Civil Jurisdiction shall alone have exclusive jurisdiction in regard to all matters in respect of the Contract.</p> <p>GOVERNING LAWS</p> <p>The contract shall be governed by the Law for the time being in force in the Republic of India.</p> <p>Note: All matters relating to this Contract and arising out of invocation of Arbitration clause are subject to the exclusive jurisdiction of the Court(s) situated at Haridwar.</p>
20	<p>FORCE MAJEURE</p> <p>"Force Majeure" shall mean circumstance which is:</p> <ol style="list-style-type: none"> beyond control of either of the parties to contract, either of the parties could not reasonably have provided against the event before entering into the contract, having arisen, either of the parties could not reasonably have avoided or overcome, and is not substantially attributable to either of the parties <p>And</p> <p>Prevents the performance of the contract,</p> <p>Such circumstances include but shall not be limited to:</p> <ol style="list-style-type: none"> War, hostilities , invasion, act of foreign enemies. Rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war. Riot, commotion or disorder by persons other than the contractor's personnel and other employees of the contractor and sub-contractors. Strike or lockout not solely involving the contractor's personnel and other employees of the contractor and sub-contractors. Encountering munitions of war, explosive materials, ionizing radiation or contamination by radio-activity, except as may be attributable to the contractor's use of such munitions, explosives, radiation or radio- activity. Natural catastrophes such as earthquake, tsunami, volcanic activity, hurricane or typhoon, flood, fire, cyclones etc. Epidemic, pandemic etc. <p>The following events are explicitly excluded from Force Majeure and are solely the responsibilities of the non-performing party:</p> <ol style="list-style-type: none"> any strike, work-to-rule action, go-slow or similar labour difficulty late delivery of equipment or material (unless caused by Force Majeure event) and

	<p>(c) economic hardship.</p> <p>If either party is prevented, hindered or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances thereof within 15 (fifteen) days after the occurrence of such event.</p> <p>The party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such party's performance is prevented, hindered or delayed. The Time for Completion shall be extended by a period of time equal to period of delay caused due to such Force Majeure event.</p> <p>Delay or non-performance by either party hereto caused by the occurrence of any event of Force Majeure shall not</p> <ol style="list-style-type: none"> Constitute a default or breach of the Contract. Give rise to any claim for damages or additional cost expense occasioned thereby, if and to the extent that such delay or non-performance is caused by the occurrence of an event of Force Majeure. <p>BHEL at its discretion may consider short closure of contract after 1 year of imposition of Force Majeure in line with extant guidelines. In any case, Supplier/Vendor cannot consider deemed short-closure after 1 year of imposition of Force Majeure.</p>
21	<p>Cartel Formation</p> <p>The Bidder declares that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s). This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process. In case, the Bidder is found having indulged in above activities, suitable action shall be taken by BHEL as per extant policies/ guidelines.</p>
22	<p>Fraud Prevention Policy</p> <p>Bidder along with its associate /collaborators /sub-contractors /sub-vendors / consultants / service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website http://www.bhel.com and shall immediately bring to the notice of BHEL Management about any fraud or suspected fraud as soon as it comes to their notice.</p>
23	<p>Suspension of Business Dealings with Suppliers / Contractors:</p> <p>The offers of the bidders who are under suspension as also the offers of the bidders, who engage the services of the banned firms / principal / agents, shall be rejected. The list of banned firms is available on BHEL web site www.bhel.com.</p> <p>If any bidder / supplier / contractor during pre-tendering / tendering / post tendering / award / execution / post-execution stage indulges in any act, including but not limited to, mal-practices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price or tampers the tendering process or acts or omits in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860(Bhartiya Nyaya Samhita 2023) or any other law in force in India, or does anything which is actionable under the Guidelines for Suspension of Business dealings, action may be taken against such bidder / supplier / contractor as per extant guidelines of the company available on www.bhel.com and / or under applicable legal provisions. Guidelines for suspension of business dealings is available in the webpage: http://www.bhel.com.</p>

24	<p>Bid should be free from correction, overwriting, using corrective fluid, etc. Any interlineation, cutting, erasure or overwriting shall be valid only if they are attested under full signature(s) of person(s) signing the bid else bid shall be liable for rejection. In the event of any Technical or Commercial queries, the same may please be addressed to the following BHEL concerned before Part I opening-</p> <ol style="list-style-type: none"> 1. Name: Sonu Kumar E-mail id: sonuk@bhel.in Phone No. 01334-28-4144 2. Name: Praveen Kumar Singh E-mail id: pk-singh@bhel.in Phone No. 01334-28-4144
25	<p>Order of Precedence: In the event of any ambiguity or conflict between the Tender Documents, the order of precedence shall be in the order below:</p> <ol style="list-style-type: none"> 1. Amendments/Clarifications/Corrigenda/Errata etc. issued in respect of the tender documents by BHEL. 2. Buyer Added Bid Specific ATC 3. GeM Bid Technical Conditions of Contract (TCC) 4. GeM GTC
26	<p>Conflict of Interest: “A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity’s interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in the bidding process, if”</p> <ol style="list-style-type: none"> a. They have controlling partner (s) in common; or b. They receive or have received any direct or indirect subsidy/financial state from any of them; or c. They have the same legal representative/ agent for purposes of this bid; or d. They have relationship with each other, directly or through common third parties, <u>that puts them in a position to have access to information about or influence on the bid of another Bidder;</u> or e. Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. <u>However, this does not limit the inclusion of the components / sub-assembly/ Assemblies from one bidding manufacturer in more than one bid;</u> or f. In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorize only one agent / dealer. There can be only one bid from the following: <ol style="list-style-type: none"> 1. The principal manufacturer directly or through one Indian agent on his behalf; and 2. Indian/ foreign agent on behalf of only one principal; <p style="text-align: center;">or</p>

	<p>g. A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid; or</p> <p>h. In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidder must proactively declare such sister/ common business/ management units in same/ similar line of business.”</p>
26	<p>NOTE:</p> <p>1. In the event of our customer order covering this tender being cancelled /placed on hold /otherwise modified, BHEL would be constrained to accordingly cancel / hold / modify the tender at any stage of execution.</p> <p>2. BHEL may negotiate the L1 rate, if not meeting our budget / estimated cost. BHEL may re-float the tender opened, if L1 price is not acceptable to BHEL even after negotiation. Any deviation from the conditions specified in TECHNO-COMMERCIAL TERMS AND CONDITIONS - Annexure-A, will lead to rejection of offer.</p> <p>3. Any change in applicable rates of Tax or any other statutory levies (Direct / Indirect) or any new introduction of any levy by means of statute and its corresponding liability for the deliveries beyond the agreed delivery date for reasons not attributable to BHEL will be to vendors account. BHEL will not reimburse the same and any subsequent claim in this respect will be summarily rejected.</p> <p>4. BHEL reserves its right to reject an offer due to unsatisfactory past performance by the respective Vendor in the execution of any contract to any BHEL project / Unit.</p> <p>5. The offers of the bidders who are under suspension and also the offers of the bidders, who engage the services of the banned firms /principal/agents, shall be rejected. The list of banned firms is available on BHEL web site www.bhel.com.</p> <p>6. Recovery / deduction as applicable as per Direct and Indirect taxes as notified by Govt. Of India from time to time will be made and information/certificate for such deduction/recoveries shall be provided by BHEL to the vendor.</p>